AMENDMENTS

The following listing of claims replaces all prior versions, and listings, of claims in the application.

Claim 1 (currently amended) A catheter having a distal end and a wall, the catheter comprising a heat transfer device located approximately at its distal end, wherein the heat transfer device is ~~engaged with~~ a flexible metal film having at least one electrical resistor flow path thereon or therethrough wherein said film is locatable around the catheter wall.

Claims 2-12 (canceled).

Claim 13 (previously presented) A catheter as claimed in Claim 1 wherein the heat transfer device includes at least one sensing element.

Claim 14 (currently amended) A catheter as claimed Claim 1 wherein at least one insulator layer is located over the electrical resistor flow path ~~structure~~.

Claim 15 (previously presented) A catheter as claimed in Claim 14 wherein the at least one insulator layer is made from parylene C.

Claim 16 (currently amended) A catheter as claimed in Claim 1 wherein the heat transfer device comprises an outwardly located layer of material selected from a group consisting of silver and gold.

Claim 17 (currently amended) A catheter ~~as claimed in Claim 1 wherein~~ having a distal end and a wall, the catheter comprising a heat transfer device located approximately at its distal end, wherein the heat transfer device is a length of the outer wall of the catheter ~~is~~ at least partly formed from doped material able to act as a heat transfer device upon application of power therethrough.

Claim 18 (previously presented) A catheter as claimed in Claim 17 wherein the doped material is selected from a group consisting of silver and gold.

Claim 19 (currently amended) A catheter as claimed in Claim 1 ~~having a wall the catheter~~ comprising at least one metal wire located in at least a portion of the wall.

Claim 20 (previously presented) A catheter as claimed in Claim 19 wherein the at least one wire is copper.

Claim 21 (currently amended) A catheter as claimed in Claim ~~19~~ 20 wherein the at least one wire is co-extruded within the catheter body.

Claim 22 (previously presented) A catheter as claimed in Claim 19 wherein the catheter wall includes at least one set of wires.

Claim 23 (original) A catheter as claimed in claim 22 wherein the catheter body has three sets of wires, each set comprising two wires.

Claim 24 (previously presented) A catheter as claimed in Claim 19 wherein each wire inside the catheter wall is easily exposable.

Claim 25 (canceled).

Claim 26 (previously presented) A catheter as claimed in Claim 1 wherein the catheter has a diameter of between approximately size 3 to 5 F.

Claim 27 (previously presented) A catheter as claimed in Claim 1 having a single distal lumen.

Claim 28 (previously presented) A catheter as claimed in Claim 27 wherein the lumen has a diameter of between approximately 0.5 to 0.7 mm.

Claim 29 (new) A catheter as claimed in claim 1, the catheter comprising a temperature sensing element to measure the ambient blood temperature wherein said heat transfer device includes one or more temperature sensors and is located approximately at the distal end of the catheter.

Claim 30 (new) A catheter for measuring cardiac output data having a distal end and a wall, the catheter comprising a temperature sensing element to measure the ambient blood temperature and a heat transfer device layered as a flexible film or coated onto or into the catheter wall wherein said heat transfer device includes one or more temperature sensors and is located approximately at the distal end of the catheter.